

Utility Week 2024
TxDOT Broadband Program Updates
Wednesday, December 4, 2024
Track Rm 2, Session 2



April 18, 2025



## **Presenter: Cristy Burch**



Cristy Burch serves as the Broadband Coordinator for the new Texas Department of Transportation Broadband Program, Cristy has worked within TxDOT's IT Division for the past 2 years and has over 18 years of total state service, specializing in process improvement and technology strategy development. A resident of Menard, TX, she understands the impact of affordable and reliable rural broadband. Cristy regularly volunteers her time to assist local non-profits and county government officials when navigating broadband planning and grant opportunities.



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#### **Broadband Program Strategies | Connect. Learn. Build.**



#### Provide Access to ROW

Right of way shall be open via utility permit to allow access for broadband providers, and to ensure no single company has preferred access.



## **Maximize Resource Sharing**

"Dig Once" by installing conduit duct banks during compatible highway construction projects and expand capacity by permitting or leasing conduit and fiber.



#### Assist Statewide Broadband Initiatives

Support the state's effort to expand broadband infrastructure to bridge the digital divide across Texas.



## Foster TxDOT Broadband Capacity

Facilitate the growth of TxDOT infrastructure to

infrastructure to promote agency initiatives for workforce connectivity and intelligent transportation systems.



#### Communication

Promote awareness of the TxDOT broadband program within the agency and with external public and private sectors.

#### **2024 Accomplishments**

Provide Access to ROW

Notification to Broadband Providers of Open Trench opportunities on TxDOT Projects

Joint trench application awareness

Provide electronic notification to Broadband providers informing of upcoming construction opportunities (STIP Notification)

Maximize Resource Sharing

Train/Assist districts with implementing joint duct bank installations on TxDOT Projects Documented procedure for determining fair value (UT Lands rate and damage schedule)

Assist Statewide Broadband Initiatives

Identified permitting report to share with Broadband Development Office to support their administration of the BEAD program

Track funding opportunities for agency infrastructure expansion

Foster
TxDOT
Broadband
Capacity

Established metrics to quantify TxDOT built fiber and conduit during construction projects

#### **Big Bang Bandwidth Upgrades**

#### Status: GREEN

Upgrade of bandwidth capacity to all TxDOT District Offices, Area Offices, Maintenance Offices, and Travel Information Centers

- 92% locations upgraded statewide
- All locations will be ordered through TEXAN cooperative contract
- <5% locations will receive a business class fiber or satellite connection, rather than dedicated fiber connection

➤ Target Completion: End Q2 2025



#### **El Paso Safety Rest Area Grant**

Status: GREEN

\$6 million in Coronavirus Capital Projects Fund were awarded to the El Paso (ELP) district to provide public Wi-Fi access to six safety rest areas (SRA).

- •IH 10 E Van Horn
- •IH 10 Fabens
- IH 10 Fort Hancock

Target Completion: End Q4 2026



#### **Alternate Solutions - Satellite**

Status: GREEN

TxDOT's Lee County Maintenance Office in Lincoln, TX will serve as the pilot site to install low earth orbit satellite to provide the site's broadband services. If successful, the solution will become available to other rural state locations that are unable to procure a fiber solution.

**Target Completion:** Q1 2025





## **Joint Duct Bank Specification Approval**

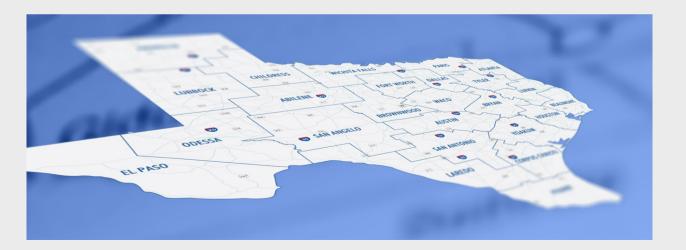
- Joint Duct Statewide Spec 6526 was approved for use starting with July 2024 letting.
- Traffic Standard Design Sheets are under final internal review.
- Duct bank is built in conjunction with TxDOT construction projects.
- TxDOT discussions are underway regarding the process for occupying ducts.





#### **Fiber Data Mapping**

- To better inform discussions for partnership opportunities, TxDOT is continuing to map TxDOT-owned fiber and conduit in a central database.
- When complete, we plan to publish routes to txdot.gov.







responsible for administering the agency's broadband program. To deploy infrastructure and reduce costs to Texas, collaboration

between public and private partners is vital. TxDOT Broadband Program will:

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## **Register for notifications**

Visit <a href="https://www.txdot.gov/about/programs/broadband-program.html">https://www.txdot.gov/about/programs/broadband-program.html</a>,



to register your company for TxDOT Broadband Program notifications.



#### **Partnering with Internet Service Providers**





Joint Duct

**Utility Joint Bid** 



## **Utility Joint Bid**

A Memorandum of Understanding (MOU) was developed in 1995 to partner with Utility Companies to Joint Bid.

- The effort must be a benefit to both parties.
- The adjustment of utility facilities is included in the proposed construction contract.
- Utility Companies inspect utility adjustment work.



#### **Utility Coordination**

#### Schematic Phase

Preliminary Utility Conflict Matrix (UCM), Subsurface Utility Engineering



Plans, Specifications & Estimate (PS&E) Phase

Weekly Status Meetings, Identify Joint Bid Utilities, Final UCM



#### Project Post-Letting

Pre-Construction Meeting, Utility Adjustment Inspection



## Joint Bid Considerations:





#### **Advantages**





## **Challenges**





#### **Project Use Case: Loop 1604 & IH 10 Interchange Project**





## Loop 1604 & IH 10 Interchange Project

 Construct Direct Connectors (Five-Level Interchange) Project Description Estimated: \$463M **Construction Cost**  Work Begin Date: Summer 2022 Project Construction • Estimated Completion: Fall 2027 Utilities • 14 total; 4 Joint Bid Agreements



#### **Joint Bid Lessons Learned**



Bids for utility work came in higher than estimated cost



Coordination with Utility Inspector

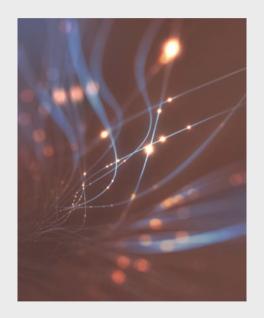


Changer Order negotiations



#### Other opportunities for partnership

- Investigating options for:
  - utilizing on-call contracts for fiber/conduit work orders
  - partnering with private industry on grant opportunities





#### **Broadband Program Forecast for 2025**



Publish TxDOT fiber map (accurate to control section)



Explore opportunities for regional broadband program outreach to internet service providers



Launch internal Broadband Community of Practice



## Connect with us!



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Partners in Coordination

**Networking Break** 





# Utility Week 2024 Broadband Coordination Q&A Wednesday, December 4, 2024

Track 2, Session 3



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